



Challenge: KEEP ON MOVIN' AND SHAKIN'

The Scoop: The laws of physics and thermodynamics dictate almost everything in our universe, from how an airplane lifts off the ground to how long it takes for microwave popcorn to pop. In this challenge, you'll make and record your own observations of forces at work that you see in your everyday life!

What You'll Need:

- Paper and a pen or pencil

The Challenge: Find examples of physics and thermodynamics in your everyday life – it's everywhere!. The force of *gravity* pulls everything toward the center of the earth. *Friction* occurs when surfaces move against each other. *Centripetal* force acts on objects moving in a curved or circular motion. *Heat transfer* results from the movement of energy from one source to another. Can you find examples of these laws in everyday life? Try looking inside where you live, outdoors, even in a car or bus; write down an object or person that you think is affected by these phenomena and how that might be happening.

Stuff to Think About:

- How do you think forces are involved in constructing buildings or driving cars?
- How do the principles of heat and energy impact things you do everyday?